## CLAIMS

A method of interference averaging in a multicarrier system,
 comprising:

providing a plurality of subcarriers:

transmitting nulls on selected ones of the subcarriers during a symbol period; and

 ${\it transmitting \ data \ on \ the \ remainder \ of \ the \ subcarriers \ during} \\ 10 \qquad {\it the \ symbol \ period}.$ 

- The method of claim 1, further comprising:
  spacing the nulls evenly on the subcarriers across a channel hand
- The method of claim 1, further comprising: randomly spacing the nulls on the subcarriers across a channel band.
  - The method of claim 1, further comprising: offsetting the subcarriers in time.
    - The method of claim 1, further comprising: offsetting the subcarriers in frequency.

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6. A transmitter capable of interference averaging in a multicarrier system, comprising:

means for transmitting packet data on plurality of subcarriers:

5 means for transmitting nulls on selected ones of the subcarriers during a symbol period; and

means for transmitting data on the remainder of the subcarriers during the symbol period.

 A method of interference averaging in a multicarrier system, comprising:

providing a plurality of subcarriers;

assigning a plurality of data symbols to a first subset of the subcarriers for transmission during a symbol period;

15 assigning the data symbols to a second subset of the subcarriers

for transmission during the symbol period; and

reducing the symbol transmit power as a function of at least one repeated data symbol in the symbol period.

The method of claim 7, further comprising:
 assigning the at least one repeated data symbol to an adjacent subcarrier.

 The method of claim 7, further comprising: rotating the at least repeated data symbol by a predetermined value.

- The method of claim 7, further comprising: assigning the data symbols according to a predetermined cell repetition mapping.
- 5 11. The method of claim 7, further comprising: offsetting the subcarriers in time.
  - The method of claim 7, further comprising: offsetting the subcarriers in frequency.

13. A transmitter capable of interference averaging in a multicarrier system, comprising:

means for assigning a plurality of data symbols to a first subset of the subcarriers for transmission during a symbol period;

means for assigning the data symbols to a second subset of the subcarriers

for transmission during the symbol period; and means for reducing the symbol transmit power as a function of at least one repeated data symbol in the symbol period.

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